

REMARKS

Claims 78-92 are pending in this application. By this amendment, claims 78-92 have been amended and new claims 95-99 have been presented for examination. Moreover, claims 93 and 94 have been canceled. In light of the amendments above and remarks set forth below, Applicant respectfully submits that each of the pending claims is in immediate condition for allowance.

As an initial matter, claims 85-89 have been objected to as improperly depending on the “device” claim 78. These claims have been amended to depend from independent claim 84. As such, withdrawal of these objections is respectfully requested. Moreover, two claims 88 were previously submitted. The second claim as 88 has been canceled and resubmitted as new claim 95. As such, withdrawal of this objection is also respectfully requested.

Claims 78-83 have been rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. Claim 78 has been amended as shown above. Accordingly, reconsideration and withdrawal of this rejection is respectfully requested.

In addition, previously submitted claims 89 and 90 (the Office Action designated them as 90 and 91) stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. These claims have been amended as shown above. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the rejection based on § 112, first paragraph.

Furthermore, claims 89-94 (the Office Action designated them as 90-95) stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicants have

amended claims 89-92 and canceled claims 93 and 94 as shown above. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the rejections based on § 112, second paragraph.

Finally, previously submitted claims 78-81, 84-87, 90 and 91 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Fischell (U.S. Patent No. 6,459,936). Moreover, claims 78-81, 84-87, 90 and 91 stand rejected under § 102(b) as being anticipated by Pless (U.S. Patent No. 7,174,213). Finally, claims 81-83, 87-89, 94 and 95 stand rejected under § 103(a) as being unpatentable over Fischell or Pless.

Independent claim 78 has been amended to recite “a control unit configured to control the plurality of electrodes to generate the respective bursts of electrical pulses in sequence having a predetermined time shift between each of the bursts in the sequence . . . wherein the predetermined time shift is substantially equal to $1/fN$, and wherein f is approximately the pathological frequency and N is the number of the plurality of electrodes.” Applicant notes that support for this amendment can be found at least in paragraphs [0050] and [0051] of the published application (U.S. Pat. Pub. No. 2006/0212089).

Moreover, this amendment satisfies the requirements of 35 U.S.C. § 112. One of skill in the art knows that specific diseases each have known pathological frequencies. (See, e.g., paragraph [0122] of the published application.) Moreover, the SI unit of frequency is the hertz defined as once cycle per second. Thus, for a disease such as Parkinson’s disease having a pathological frequency f of approximately 5 (which is known in the medical profession), the time shift recited in claim 78 will be calculated as $1/5$ (i.e., .2 seconds) divided by the number of

electrodes. As such, independent claim 78 clearly satisfies the definiteness requirement of 35 U.S.C. § 112.

With regard to the prior art, Applicant has thoroughly reviewed both Fischell and Pless, but has not identified any disclosure or suggestion to base a time shift in a sequence of bursts of electrical pulses on the pathological frequency of the disease being treated. Accordingly, Applicant respectfully submits that claim 78 along with its dependent claims is patentable over the prior art of record for at least this reason. Moreover, claim 84 recites similar subject matter as required by claim 78. As such, claim 84 and its dependent claims is also patentable over the prior art of record. Finally, Applicant notes that claims 93 and 94 have been canceled. Accordingly, with no issues remaining regarding the prior art, Applicant respectfully requests the withdrawal of the rejections based on § 102(b) and § 104(a).

Finally, Applicant notes that claims 95-99 have been added to more fully cover the scope of the present invention. New claims 95-99 include limitations that are neither disclosed nor suggested by prior art of record. Favorable consideration and allowance of these claims is therefore respectfully requested.

In view of the above, Applicant respectfully asserts that each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue.

In the event a fee is required or if any additional fee during the prosecution of this application is not paid, the Patent Office is authorized to charge the underpayment to Deposit Account No. 50-2215.

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